

UC 10916 10F
(Revised 11/1/10)

Petroleum Engineering Program

To: Undergraduate Council

From: Dr. David P. Shattuck, Associate Dean, Undergraduate Programs
Dr. Tom Holley, Chair, Petroleum Engineering
Cullen College of Engineering

Date: November 1, 2010

Subject: Petroleum Engineering Program Changes

APPROVED DEC 08 2010
RECEIVED NOV 04 2010

Attached we are submitting a revised version of the Petroleum Engineering Degree plan proposal. The changes in the degree plan are:

1. Replace Thermodynamics from MECE by CHEE due to lack of capacity in MECE to accommodate PETR students. This requires an additional CHEM and one CHEE prerequisite.
2. Replace Fluid Mechanics from CIVE by CHEE due to the named CIVE course no longer being offered.
3. Three required courses converted to electives. PETR 5311 Creativity and Innovation, PETR 5300 Data Mining and Database Management, and INDE 4373 Engineering Leadership & Entrepreneurism.
4. Electives reduced from three courses to two courses.
5. One course will be shared in the fourth year by both the Production Engineering Emphasis and Chemical Engineering Emphasis with Thermodynamics prerequisite. The Chemical Engineering Emphasis has one less semester credit hour.
6. Co-requisite courses relabeled "credit or concurrent enrollment" to reduce dependencies.
7. Rearrangement of courses to eliminate one semester with too many (18) credits of technical courses.

The above changes imply a net reduction of six (6) credit hours. It is expected that a diligent student starting with Calculus I as an entering Freshman, should be able to complete this curriculum in four years.

Dean's Signature: _____

David P. Shattuck

Date: _____

04 Nov 2010

PETR First Year

Fall Semester	Hours
ENGL 1303. English Composition I	3
MATH 1431. Calculus I ²	4
CHEM 1331. Fundamentals of Chemistry	3
CHEM 1111. Fundamentals of Chemistry Laboratory	1
GEOL 1330. Physical Geology	3
Total	14

Spring Semester	Hours
CHEM 1332. Fundamentals of Chemistry	3
CHEM 1112. Fundamentals of Chemistry Laboratory	1
PETR 1111. Introduction to Hydrocarbon Resources	1
ENGL 1304. Freshman Composition II	3
MATH 1432. Calculus II	4
PHYS 1321. University Physics I	3
Total	15

PETR Second Year

Fall Semester	Hours
CHEE 1331. Computing for Engineers	3
PHYS 1322. University Physics II	3
INDE 2333. Engineering Statistics I	3
MATH 2433. Calculus III	4
Visual and Performing Arts Core	3
Total	16

Spring Semester	Hours
CHEM 2331. Chemical Processes	3
MECE 3400. Introduction to Mechanics	4
PETR 2311. Reservoir Petrophysics	3
HIST 1377. The US to 1877	3
MATH 3321. Engineering Mathematics	3
Total	16

PETR Third Year

Fall Semester	Hours
HIST 1378. US History Since 1877	3
ENGI 2304. Technical Communication	3
CHEE 2332. Chemical Engineering Thermodynamics 1	3
PETR 5392. Project Management	3
PETR 3362. Reservoir Engineering I	3
PETR Elective 1	3
Total	18

Spring Semester	Hours
POLS 1336. US and Texas constitutions and Politics	3
CHEE 3363. Fluid Mechanics for Chemical Engineers	3
PETR 3211. Petroleum Engineering Laboratory	2
PETR 3321. Pressure Transient Testing	3
PETR 3313. Reservoir Fluids	3
PETR 3315. Introduction to Well Logging	3
Total	17

PETR Fourth Year (Production Engineering Emphasis)

Fall Semester	Hours
POLS 1337. US Government	3
PETR 3318. Well Drilling and Completion	3
PETR 5324. Theory of Reservoir	3
PETR 5310. Petroleum Production Economics	3
PETR 5350. Natural Gas Engineering	3
Total	15
Spring Semester	Hours
Humanities Core	3
Social and Behavioral Science	3
PETR Elective 2	3
PETR 5302. Reservoir Engineering II	3
PETR 5325. Integrated Reservoir Characterization	3
PETR 5372. Petroleum Production Operations	3
Total	18
Degree Total Hours:	129

PETR Fourth Year (Chemical Engineering Emphasis)

Fall Semester	Hours
POLS 1337. US Government	3
PETR 3318. Well Drilling and Completion	3
PETR 5324. Theory of Reservoir	3
CHEM 3331. Fundamentals of Organic Chemistry	3
CHEM 3221. Fundamentals of Organic Chemistry Laboratory	2
Total	14
Spring Semester	Hours
Humanities Core	3
Social and Behavioral Science	3
PETR Elective 2	3
PETR 5302. Reservoir Engineering II	3
PETR 5325. Integrated Reservoir Characterization	3
CHEE 3300. Materials Science and Engineering I or CHEE 3333. Chemical Engineering Thermodynamics II	3
Total	18
Degree Total Hours:	128